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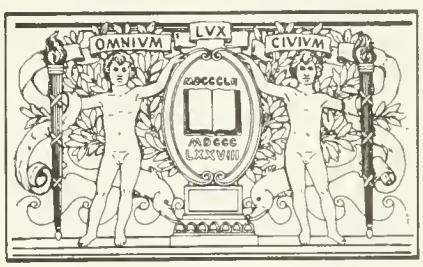

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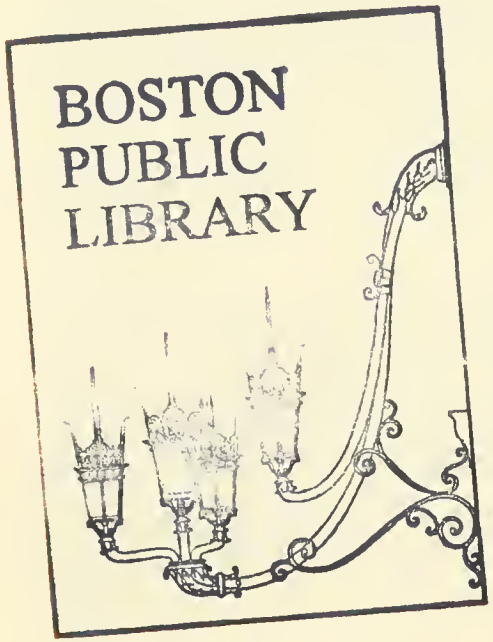

MARKET ORIENTATION AND DEVELOPMENT POTENTIALS RETAIL AND FOOD SERVICE

THE MASSACHUSETTS TRANSPORTATION BUILDING
BOSTON, MASSACHUSETTS

Prepared by:

Halcyon Ltd.
Hartford, Connecticut

October 31, 1981

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FOOD SERVICE POTENTIAL

Halcyon projects that food service demand is sufficient to support in excess of 20,000 square feet of restaurants if tailored to meet lunchtime and dinner time peak demand.

The 1984 market will support a 7,500 square foot "ethnic food fare", 9,000 square feet of moderately priced cafes/bistros and 10,800 square feet of premium priced restaurants. The increased demand in 1988 will justify more square footage of food service, or alternatively, will increase the productivity of the food service aimed at the 1984 market.

In allocating food service space in the Transportation Building we have made allowances for the services to be provided by the Four Seasons Hotel. We do not anticipate that the Hotel will be competitive in the low-priced, quick-service area. However, we predict that they will impact the moderate and premium priced restaurants. Accordingly, we have allocated to the Transportation Building, 75% of moderate price demand and only 40% of premium price demand.

METHODOLOGY

Daytime Demand

Halcyon derived lunch time demand by separating the market into three segments, Captive Trade Area, Primary Trade Area and Secondary Trade Area as defined in Section 1.0. Using capture rates that decline the farther the sub-market is from the site, we determine the lunch time demand. Halcyon projects the weekday lunch time demand for food service to be 3,860 daily in 1984 and 4,730 daily in 1988.

Evening Demand

The methodology to project evening food service demand and capture rates is similar to the lunch time methodology. The exceptions are that the movie theatre patrons are included, price point preferences change, and the number of turns change.

Capture Rates

Capture rates are based on this consultant's experience and accepted food industry norms. They are conservative given that the Downtown Crossing capture 14-21% of the Central Business District's office workers' lunch time demand. Presently, the Theatre District/Park Square market is underserviced for lunchtime. Halcyon projects there are 35,500 people wanting to eat lunch and our survey of the area determined that the current capacity was not sufficient to meet demand. Presently, area population is going outside the market area to eat lunch or is brown bagging. See Tables A and B.

Price Points

After determining the lunch time demand, Halcyon projected the price point preferences for the lunch time customers. Based on our research in other urban office populations, Halcyon projects that the prevalent price point distribution would be 47% for popular priced food, 36% got moderate priced cafe/bistros and 17% for premium priced meals.

Capacity

Daytime

Based on the level and price point preferences of the lunch time customers, Halcyon can project the capacity the restaurants should meet. The popularly priced "Food Bazaar" can turn their customers over in thirty minutes. This indicates that there will be 3.5 turns during the lunch time hours 11:30 - 1:30. Medium priced restaurants can accomodate 2.5 turns during the lunch time hours, premium priced restaurants 1.5 turns. Dividing the lunch time demand by the number of turns gives us the number of seats which we then use to determine the size of the seating area and kitchen.

Evening

While dinner customers lean towards medium and premium priced restaurants, a large portion of the demand will be from theater goers, whose time for eating is limited. For this reason we anticipate 2.0 turns for these categories of restaurants.

The "Food Bazaar" will benefit from late afternoon traffic and those theater patrons looking for something less than a full meal, and we anticipate 3.0 turns on average.

ANALYSIS

In the medium and premium priced restaurant categories our recommended space allocation (see Section 1.0) is less than demand indicated in Tables D and G, following. In calculating allocation we have taken into account the proposed food service facilities planned for the new Four Seasons Hotel.

The Tables listed below are on the pages following. They track the demand from population through capture and price point preference to projected restaurant capacity needs for years 1984 and 1988 both lunch time and evening.

Table A	1984	Site Lunchtime Demand
B	1988	Site Lunchtime Demand
C	1984/88	Lunchtime Price-point Preference
D	1984/88	Lunchtime Capacity Demand
E	1984/88	Site Dinner Demand
F	1984/88	Dinner Price-point Preference
G	1984/88	Dinner Capacity Demand

Source documentation and assumptions for the above Tables are in Appendix A.

All dollar figures are expressed as actual dollars. That is to say, in projecting future expenditures, inflationary trends have been used, equivalent to 8% per annum unless otherwise noted.

TABLE A

PROJECTED TRANSPORTATION BUILDING
LUNCHTIME DEMAND - 1984

CAPTIVE TRADE AREA	1984 Population	Site Capture	1984 Lunch Time Demand
Transportation Building Employees	2,000 [1]	65%	1,300
Daily Guests	400 [2]	30%	120
PRIMARY TRADE AREA			
Office Workers	4,000 [3]	12%	480
Medical Center Employees	3,600 [4]	8%	288
Medical Center Students	1,600 [5]	6%	96
Out Patients & Visitors	1,185 [6]	4%	48
Residential	700 [7]	3%	21
Hotels	1,984 [8]	5%	99
Theatre	---	---	---
Movie Theatre	---	---	---
SECONDARY TRADE AREA			
Office/Commercial Workers	33,500 [9]	4%	1,340
Residential	2,000 [10]	2%	40
Hotels	900 [11]	3%	27
			3,859

See Appendix A for Sources and Footnotes.

TABLE B

PROJECTED TRANSPORTATION BUILDING
LUNCHTIME DEMAND - 1988

CAPTIVE TRADE AREA	1988 Population	Site Capture	1988 Lunch Time Demand
Transportation Building Employees	2,000	65%	1,300
Daily Guests	400	30%	120
PRIMARY TRADE AREA			
Office Workers	10,000 [13]	12%	1,200
Medical Center Employees	4,800 [14]	8%	384
Medical Center Students	1,600	6%	96
Out Patients & Visitors	1,185	4%	48
Residential	1,276 [15]	3%	38
Hotels	2,495 [16]	5%	125
Theatre	---	---	---
Movie Theatre	---	---	---
SECONDARY TRADE AREA			
Office/Commercial Workers	33,500	4%	1,340
Residential	2,500	2%	50
Hotels	975	3%	29
			4,730

TABLE C

TRANSPORTATION BUILDING
FOOD SERVICE PRICE REFERENCES
FOR CAPTIVE POPULATION

CAPTURED POPULATION		1984				1988		
		LUNCH PREFERENCE [20]				LUNCH PREFERENCE		
CAPTIVE TRADE AREA	FOOD SERVICE DEMAND	Low ($2.50)	Medium ($5.50)	High ($9.00)		Low	Medium	High
Transportation Building Employees	1,300	47% / 611	36% / 468	17% / 221	1,300	47% / 611	36% / 468	17% / 221
Building Visitors	120	47% / 56	36% / 44	17% / 20	120	47% / 56	36% / 44	17% / 20
PRIMARY TRADE AREA								
Office Workers	480	47% / 226	36% / 173	17% / 81	1,230	47% / 564	36% / 462	17% / 204
Medical Center Employees	288	47% / 135	36% / 104	17% / 49	384	47% / 181	36% / 138	17% / 65
Medical Center Students	96	65% / 62	25% / 24	10% / 10	96	65% / 62	25% / 24	10% / 10
Out Patients & Visitors	48	47% / 22	36% / 16	17% / 10	48	47% / 22	36% / 16	17% / 10
Residential	21	45% / 9	40% / 8	15% / 4	38	45% / 17	40% / 15	15% / 6
Hotels	99	25% / 25	35% / 34	40% / 40	125	25% / 31	35% / 44	40% / 50

TABLE C (continued)

TRANSPORTATION BUILDING
FOOD SERVICE PRICE REFERENCES
FOR CAPTIVE POPULATION

CAPTURED POPULATION	1984				1988			
	FOOD SERVICE DEMAND	LUNCH PREFERENCE 20 Low ($2.50)	Medium ($5.50)	High ($9.00)		Low	LUNCH PREFERENCE Medium	High
SECONDARY TRADE AREA								
Office Workers	1,340	47% / 630	36% / 482	17% / 228	1,340	47% / 630	36% / 482	45% / 228
Residential	40	45% / 18	40% / 16	15% / 6	50	45% / 23	40% / 20	15% / 7
Hotels	27	25% / 7	35% / 9	40% / 11	29	25% / 7	35% / 10	40% / 12
TOTALS	3,859	1,801	1,378	680	4,760	2,204	1,723	833

TABLE D

TRANSPORTATION BUILDING

MINIMUM FOOD SERVICE
Based on Demand

LUNCH CAPACITY
1984

Preference	Daily Count	÷	Turns	=	# of Seats	x	Sq. Ft./ Seat	=	Seating Area	+	Kitchen	=	Sq. Ft. Total
Fast Food/Low Price	1,801		3.5		514		10		5,140		2,350		7,490
Medium Price	1,378		2.5		551		12		6,612		3,560 (35%)		10,172
Premium Price	680		1.5		452		14		6,328		4,218 (40%)		10,546
													28,208 Sq. Ft.

LUNCH CAPACITY
1988

Preference	Daily Count	÷	Turns	=	# of Seats	x	Sq. Ft./ Seat	=	Seating Area	+	Kitchen	=	Sq. Ft. Total
Fast Food/Low Price	2,204		3.5		630		10		6,300		2,350		8,650
Medium Price	1,693		2.5		677		12		8,124		4,374 (35%)		12,498
Premium Price	833		1.5		555		14		7,775		5,180 (40%)		12,950
													34,098 Sq. Ft.

TABLE E

PROJECTED DINNER DEMAND FOR
TRANSPORTATION BUILDING - 1984 & 1988

CAPTIVE TRADE AREA	1984 Population	Capture Rate	Dinner Demand	1988 Population	Dinner Demand
Transportation Building Employees	2,000	5%	100	2,000	100
Daily Guests	400	5%	20	400	20
PRIMARY TRADE AREA					
Office Workers	4,000	5%	200	10,000	500
Medical Center Employees	3,600	4%	144	4,800	192
Medical Center Students	1,600	3%	48	1,600	48
Out Patients & Visitors	1,185	2%	24	1,185	24
Residential	700	6%	42	1,276	77
Hotels	1,984	15%	298	2,495	375
Theatre	1,800,000 ÷ 260 = 6,923 [17]	12%	831	2,000,000 ÷ 260 = 7,692 [19]	923
Movie Theatre	700,000 ÷ 360 = 1,944 [18]	10%	195	1,944	195
SECONDARY TRADE AREA					
Office/Commercial Workers	33,500	1.5%	503	33,500	503
Residential	2,000	6%	120	2,500	150
Hotels	900	8%	72	975	78
			2,597		3,185

TABLE F

TRANSPORTATION BUILDING
FOOD SERVICE PRICE REFERENCES FOR CAPTIVE POPULATION

CAPTURED POPULATION		1984				1988		
		LUNCH PREFERENCE [20]				LUNCH PREFERENCE		
CAPTIVE TRADE AREA	FOOD SERVICE DEMAND	Low ($3.50)	Medium ($8.00)	High ($14.00)		Low	Medium	High
Transportation Building Employees	100	30% / 30	40% / 40	30% / 30	100	30% / 30	40% / 40	30% / 30
Building Visitors	20	30% / 6	40% / 8	30% / 6	20	30% / 6	40% / 8	30% / 6
PRIMARY TRADE AREA								
Office Workers	200	30% / 60	40% / 80	30% / 60	500	30% / 150	40% / 200	30% / 150
Medical Center Employees	144	30% / 43	40% / 58	30% / 43	192	30% / 57	40% / 77	30% / 58
Medical Center Students	48	50% / 24	40% / 19	10% / 5	48	50% / 24	40% / 19	10% / 5
Out Patients & Visitors	24	45% / 11	35% / 8	20% / 5	24	45% / 11	35% / 8	20% / 5
Residential	42	30% / 12	40% / 17	30% / 13	77	40% / 31	40% / 31	20% / 15
Hotels	298	10% / 29	30% / 89	60% / 180	375	10% / 37	30% / 112	60% / 226
Theatre	831	10% / 83	30% / 249	60% / 499	923	10% / 92	30% / 277	60% / 554
Movie Theatre	195	30% / 58	50% / 97	20% / 40	195	30% / 58	50% / 97	20% / 40

TABLE F (continued)

TRANSPORTATION BUILDING
FOOD SERVICE PRICE REFERENCES FOR CAPTIVE POPULATION

CAPTURED POPULATION	1984					1988		
	FOOD SERVICE DEMAND	LUNCH PREFERENCE 20 Low ($3.50)	Medium ($8.00)	High ($14.00)		Low	LUNCH PREFERENCE Medium	High
SECONDARY TRADE AREA								
Office Workers	503	30% 151	40% 201	30% 151	503	30% 151	40% 201	30% 151
Residential	120	30% 36	40% 48	30% 36	150	30% 45	40% 60	30% 45
Hotels	72	10% 7	30% 21	60% 44	78	10% 8	30% 23	60% 47
TOTALS	2,597	550	935	1,112	3,185	700	1,153	1,332

TABLE G

TRANSPORTATION BUILDING

MINIMUM FOOD SERVICE
Based on Demand

EVENING CAPACITY
1984

Preference	Daily Count	÷	Turns	=	# of Seats	x	Sq. Ft./ Seat	=	Seating Area	+	Kitchen	=	Sq. Ft. Total
Fast Food/Low Price	550		3		183		10.5		1,920		2,350		4,270
Medium Price	935		2		467		12		5,604		3,016 (35%)		8,620
Premium Price	1,112		2		556		14		7,784		5,186 (40%)		12,970
													25,860 Sq. Ft.

EVENING CAPACITY
1988

Preference	Daily Count	÷	Turns	=	# of Seats	x	Sq. Ft./ Seat	=	Seating Area	+	Kitchen	=	Sq. Ft. Total
Fast Food/Low Price	700		3		233		10.5		2,446		2,350		4,796
Medium Price	1,153		2		576		12		6,912		3,720 (35%)		10,632
Premium Price	1,332		2		666		14		9,324		6,216 (40%)		15,540
													30,968 Sq. Ft.

RETAIL SALES POTENTIAL

Situated between Boylston/Newbury Street retail node and Downtown Crossing the Park Plaza area is not regarded as an important retail entity within the City of Boston.

We perceive that the success of the retail stores at the Transportation Building will depend upon,

- frequent visitation by those employed in the area.
- impulse buying by the large theatre audience.
- additional support from visitors and residents

RETAIL DEMAND

Retail demand in the Theatre District/Park Square area will support as much as 32,500 square feet of retail.

Tables J & K (following) show a demand for retail space in the Transportation Building.

YEAR	CAPTURED DISPOSABLE DOLLARS	DIVIDED BY PROJECTED SALES/SQ. FT.	RETAIL CAPACITY IN SQ. FT.
1984	6,523,000	$200	32,615
1988	11,731,000	$272	48,128

METHODOLOGY

Halcyon took the 1984 and 1988 population projections. For all sub-groups, except guests and theatre patrons, Halcyon projected the gross income. We then calculated the percentage of gross income spent on retail and food service other than automotive goods and retail food.

Taking the percentage of these retail expenditures spent on retail goods, (85%) we then projected a capture of those retail expenditures.

For the hotels and theatre patrons, Halcyon had more specific figures on how much hotel guests and theatre patrons spent on retail.

Appendix A - Source Documentation

Appendix A

TRANSPORTATION BUILDING
SOURCE DOCUMENTATION AND ASSUMPTIONS
TABLES A - J

1. Source: Metropolitan Boston Transit Authority and Department of Public Works.

2. Source: Estimates provided by tenant agencies.

3. Source: BRA "Preliminary Report" Boston Theatre District May 1979.

4. Source: Estimates provided by New England Medical Center, August 1981.
   3,000 employees
   1,600 students
   250,000 out-patient visits per year
   500 visitors daily.
   Halcyon projections; 4,500 employees by 1984 and 6,000 by 1988 (in keeping with current and future expansion plans). Assume 20% of employees work on third shift and are excluded from market estimate.

5. Source: Ibid.

6. Source: Ibid. 250,000/365 days = 685 per day plus 500 visitors = 1,185.

7. Source: 290 units x 2.4 persons.

8. Source: Hotels included are 57 Park Plaza Hotel, the Boston Park Plaza Hotel, the Hotel Bradford and the smaller Milner Hotel. Hotel population figures a 74% occupancy rate (Pannell, Kerr Foster. Statistics and Trend of Hotel and Motel Business in Boston July, 1981) 1,827 rooms and 1.4 people per room. (This is based on 35% double occupancy, and Halcyon's judgement that the Boston Market is oriented towards conventions and families, not business clients). Halcyon projects that the occupancy rate of hotels will increase to 80% once the flood of hotel rooms hitting the market in 1984 becomes absorbed. 20% of Four Seasons Hotel's 300 rooms are projected to be occupied during their opening year in 1984.

9. Source: Projected office population for Park Square Area was 44,000 in 1984 as reported in "Population and Employment Projections by Neighborhoods 1975-2000." Census Tract Population Survey. By excluding the three shifts of Medical Center Employees, Transportation Building Workers and Primary Trade Area Office Employment, Halcyon projects 33,500 office/commercial workers in the Secondary Trade Area.

10. Source: Bay Village population.

11. Source: The Ritz Carlton Hotel; 350 rooms x 74% x 1.4 people per room. The Lafayette Center hotel; 525 rooms x 74% x 1.4 people per room.

12. Source: Halcyon Ltd. Based on survey profiles conducted in other urban communities.

13. Source: Office population will increase because of the future development or a minimum of 600,000 square feet each on Parcels 30 and 31. At 200 square feet per employee, the office population conservatively will increase by 6,000 people. Project sizes derived from discussions with BRA.

14. Op. cit. Footnote #4 80% x 6,000 = 4,800.

15. Source: 240 units projected for Parcel 31. 240 units x 2.4 = 576.

16. Source: With an additional 400 rooms in the Proposed Four Seasons Hotel plus an anticipated increase in the occupancy rate from 74% to 80%, hotel visitors in the primary market is projected to be .8 x 1.4 . 2,227 = 2,495. Hotel visitors population in the secondary market will be .8 x 1.4 . 875 = 975.

17. 1.3 million in 1979/1980. Source: The Contribution of Boston Theatre District Audiences to Boston's Economy. March, 1981.

Increased 1980/1981 audience to 1.5 million because late opening of Music Hall biased 1979/1980 figure downward.

Halcyon projects 100,000 person average increase per year. This is conservative compared to Theatre District Association projection of 200,000 person average increase per year.

18. The movie theatre populations were 700,000. Source: BRA The Impact of Theatre and Performing Arts on Boston's Ecomony. August, 1979. Page 36. Chart: "Attendance of films in Theatre District 1978 - Sack Theatre."

19. Halcyon projects an annual increase of 50,000 theatre patrons a year. Op. Cit. #17.

20. Research conducted by Halcyon Ltd. in urban office markets. Meal prices expressed in 1981 dollars.

21. Source: Transportation Building Employees' gross incomes were projected based on interviews with tenant agencies.

22. Office workers and Medical Center Employees. Source: Boston's New High Rise Office Buildings: A Study of the Employees and Their Housing Preferences. B.R.A. July, 1974. Straight line projections based on Consumer Price Index reported in The Statistical Abstract of the United States 1980 and The Wall Street Journal May, 1980 to August, 1981. CPI assumed to be 8% from 1981-1988.

1974 - 13,970
1981 - 24,639
1984 - 33,521
1988 - 44,605

23. Out patients and visitors, building visitors, hotel guests and movie theatre patrons are assumed to have an income similar to the SMSA median income. 1975 Median Income. Source: U.S. Census of Population and Gladstone Associates.

1975 - 14,660
1981 - 23,470
1984 - 31,525
1988 - 39,800

24. Medical Students income assumed to be $8,000 a year in 1981 increasing 7% a year. 1984 - 10,077. 1988 - 13,210.

25. We project the median residential household income to be $17,388 in 1980. Source: Characteristic of Boston's Population and Housing, 1980. B.R.A. February, 1981. Median income figure was $16,100 for surrounding Back Bay Beacon Hill area in 1979, raised 8% to reach 1980. In 1984, we project household income to be $23,656, $32,188 in 1988, an annual increase of 8%.

26. Hotel guests' retail expenditures is $8.33 per day in 1980. Source: Greater Boston Convention & Visitors Bureau. Inflated at 8% a year. 1984: $11.33. 1988: $15.41.

27. Assume annual income of daily average attendance is same as daily income of annual attendance.

28. Theatre goer's retail expenditures was surveyed at $1.95 per person in 1980. Source: BRA. The Contribution of Boston Theatre District Audiences to Boston's Economy, March, 1981. We project that retail expenditures will be $2.65 in 1984 and $3.61 in 1988, based on projected inflation factor of 8%.

29. Retail expenditures do not include automotive expenditures, retail food, housing costs and personal and property taxes. The percent gross income spent on retail/restaurant was calculated by dividing total retail expenditures in the SMSA in the aforementioned categories divided by total household income in the SMSA. End result: 36.2%. Source: Total retail trade was taken from 1977 U.S. Census of Retail Trade-Area Statistics. Total Income was from the 1970 U.S. Census of Population and 1974 update. SMSA total income was taken by multiplying midpoint of income group times the size of the group. Picked $32,500 as midpoint of income group with income greater than $25,000.

30. In 1977, expenditures at eating and drinking establishments represented 15% of total retail expenditures minus automotive and retail food expenditures in Boston's SMSA, therefore retail expenditures are 85% of available dollars. Source: U.S. Census of Retail Area Statistics, 1977.

TABLE J

PROJECTED RETAIL EXPENDITURES IN
BOSTON TRANSPORTATION BUILDING - 1988

	1988 Population	1988 Gross Income (000)	1988 Disposable Income Spent on Retail/Rest. (000)	1988 $ Spent on Retail[30] (000)	Capture Rate	1988 Retail Demand (000)
Transportation Building Employees	2,000	62,304	22,554	19,179	5%	959
Building Visitors	400	15,920	5,763	4,899	2%	98
PRIMARY TRADE AREA						
Office Workers	10,000	446,050	161,470	137,250	2%	2,745
Medical Center Employees	4,800	214,104	77,506	65,880	2%	1,318
Medical Center Students	1,600	21,136	7,651	6,503	2%	130
Out Patients & Visitors	1,185	47,163	17,073	14,512	1%	145
Residential	1,276	41,072	14,868	12,638	5%	632
Hotels	2,495	---	---	14,034	10%	1,403
Movie Theatre	1,944	77,371	28,008	23,807	.5%	119
Theatre	1,800,000	---	---	6,498	15%	975
SECONDARY TRADE AREA						
Office/Commercial Workers	33,500	1,494,268	540,925	459,786	.5%	2,299
Residential	2,500	80,470	29,130	24,761	2%	495
Hotels	1,468	---	---	8,257	5%	413
						11,731

Source documentation and assumptions are in Appendix A.
All dollar figures are expressed as actual dollars.

TABLE H

PROJECTED RETAIL EXPENDITURES IN
BOSTON TRANSPORTATION BUILDING - 1984

CAPTIVE TRADE AREA	1984 Population	1984 Gross Income (000)	1984 Disposable Income Spent on Retail/Rest. (000)	1984 $ Spent on Retail (000) [30]	Capture Rate	1984 Retail Demand (000)
Transportation Building Employees	2,000	48,000 [21]	17,376	14,770	5%	739
Building Visitors	400	12,610 [23]	4,565	3,880	2%	78
PRIMARY TRADE AREA						
Office Workers	4,000	134,084 [22]	48,538	41,257	2%	825
Medical Center Employees	3,600	120,676	43,685	37,132	2%	743
Medical Center Students	1,600	16,123 [24]	5,837	4,961	2%	99
Out Patients & Visitors	1,185	37,357	13,523	11,495	1%	115
Residential	700	16,559 [25]	5,995	5,096	5%	255
Hotels	1,984	---	---	8,205 [26]	10%	821
Movie Theatre	1,944 (daily)	61,285 [27]	22,185	18,857	5%	94
Theatre	1,800,000 (annual)	---	---	4,770 [28]	15%	716
SECONDARY TRADE AREA						
Office/Retail Workers	33,500	1,122,954	406,510	345,534	.5%	1,728
Residential	2,000	47,312	17,127	14,558	2%	291
Hotels	900	---	---	372	.5%	19
						6,523

Source documentation and assumptions are in Appendix A.
All dollar figures are expressed as actual dollars.

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